

National Roofing Contractors Association Washington, D.C. Office 324 Fourth Street, N.E. Washington, D.C. 20002 202/546-7584

Fax: 202/546-9289 http://www.nrca.net

Statement of Rob McNamara

Senior Vice President, National Roofing Contractors Association

House Committee on Small Business

"Climate Change Solutions for Small Business and Family Farmers"

April 29, 2009

Madame Chairwoman and distinguished members of the committee, thank you for the opportunity to testify on behalf of the National Roofing Contractors Association (NRCA) today to explore solutions to climate change and the impact on small businesses. I am Rob McNamara, president of F.J.A. Christiansen Roofing, a Tecta America Company and roofing contractor in Milwaukee, Wisconsin. I now serve as Senior Vice President of NRCA and will become President of the association on June 1, 2009.

Established in 1886, NRCA is one of the nation's oldest construction trade associations and the voice of professional roofing contractors worldwide. It is an association of roofing, roof deck, and waterproofing contractors; industry-related associate members, including manufacturers, distributors, architects, consultants, engineers, and city, state, and government agencies; and international members. NRCA has over 4,200 members from all 50 states and 54 countries. NRCA contractors typically are small, privately held companies, and the average member employs 45 people in peak season, with sales of \$4.5 million per year.

The Role of Roofing in Climate Change Solutions

The roofing industry is uniquely positioned to play a significant role in developing innovative solutions to climate change and energy-related issues now being addressed by Congress. These opportunities include: 1) increased energy efficiency including "green" roof systems, such as vegetative and reflective ("cool") roofs in appropriate climates, and daylighting to reduce interior electric lighting requirements; and, 2) production of energy from rooftops via solar electric, solar thermal and wind energy generation.

First, with respect to increased building efficiency, currently, residential and commercial buildings in the U.S. account for approximately 30-40 percent of the carbon emissions generated by our nation. Providing incentives for building owners to adopt more energy-efficient roofing systems, and removing obstacles in federal law which now restrict the adoption of energy-efficient roofs, will provide numerous benefits to the public by enhancing energy conservation and reducing carbon emissions from the "built environment."

NRCA has a long history of promoting the development and installation of innovative energy-efficient roofing technologies. NRCA publishes two technical publications aimed at educating roofing contractors and building owners about the availability and benefits of energy-efficient roof systems. The NRCA Green Roof Systems Manual provides technical know-how to contractors on the installation and maintenance of vegetative roofs, and the NRCA Guidelines for the Design of Energy-Efficient Roof Systems is written for design professionals who want to incorporate energy-efficient roofs into their building designs. By providing these technical publications to roofing contractors and other industry participants, NRCA has been facilitating greater levels of investment in energy-efficient buildings that provide for a sustainable environment for many years.

Current trends toward the adoption of "green" buildings are key drivers of economic growth in our industry, and NRCA is working to maximize the environmental, energy conservation and economic benefits of expanding green buildings. NRCA contractor, manufacturer and distributor members are in the forefront of developing and installing a variety of energy-efficient technologies that can help reduce carbon emissions and provide other environmental benefits. These include vegetative roofs that integrate plants to reduce greenhouse gases and storm-water runoff, "cool" roofs that reduce energy consumption and the "urban heat island" effect by reflecting sunlight, and daylighting systems that maximize the use of natural light to reduce interior electric lighting requirements. NRCA's *Roofing, Energy and the Environment Series* provides online education to contractors and others regarding the installation of these "green" roofing technologies, as well as photovoltaic roof systems.

Second, the U.S. built environment continues to see the increased use of rooftop technologies to increase energy production from sustainable sources. These include photovoltaic roof systems (including "Built In Photovoltaic" products) that generate electricity from solar power, solar thermal rooftop installations to reduce energy requirements for heated water, and roof mounted wind turbines for power generation. Development of these and other green roofing technologies stimulates economic growth and job creation while simultaneously reducing energy consumption and protecting the environment.

In addition to conserving energy, roof surfaces across the nation offer an economical and ready-to-use platform for the production of clean, renewable energy using solar and wind

sources that are an alternative to traditional energy sources that impact climate change. The U.S. possesses about 225 billion square feet of stable roof surface among existing commercial and residential buildings, much of which could be used to capture solar and wind energy. According to the Center for Environmental Innovation in Roofing, if one-third of this area was used for solar energy production via photovoltaic roof systems, our rooftops could generate over 50,000 megawatts of renewable power annually or about 8% of our current electricity generating capacity. While based upon current solar technology, the power generation capabilities of photovoltaic systems would increase even further with advances in PV technology which we expect in the coming years.

Climate Change Legislation

NRCA is pleased to see that the "discussion draft" of climate-change legislation recently proposed by Representatives Henry Waxman (D-CA) and Rep. Edward Markey (D-MA) recognizes the positive role that energy-efficient roof systems can play in efforts to address this issue. As Congress considers legislation to address climate change issues, NRCA urges members to adopt market-based solutions and incentives wherever possible to achieve public policy goals in this area.

NRCA welcomes the opportunity to work constructively with Congress and other stakeholders on legislation that will maximize the potential of both energy-efficient and energy-producing roofing systems to contribute to efforts to reduce carbon emissions. While NRCA is still in the process of reviewing the 600-plus page "American Clean Energy and Security Act (ACES) of 2009," we have a number of comments on the proposal at this time.

The ACES proposal contains provisions to accelerate the adoption of so-called "cool" roofs that conserve energy and reduce carbon emissions by achieving higher levels of solar reflectance for both residential and commercial buildings. NRCA shares the objective of the authors of this proposal, which is to accelerate the adoption of energy-efficient roofs to the maximum extent feasible. It is critical to note, however, that different climate zones require different types of energy-efficient roofs to maximize energy conservation and environmental benefits. As such, we need to ensure that any legislation contains meaningful and flexible roof standards which reflect the reality of differing climatic and geographic zones and other important factors, and we are committed to working with Congress in this regard.

NRCA also shares the goals of the authors of the ACES proposal with respect to setting new targets for building codes in order to maximize energy efficiency in commercial and residential buildings. As mentioned previously, NRCA has been working for many years to facilitate the adoption of energy-efficient roofing systems as rapidly as possible. However, we do have concerns that the prescriptive approach taken in the proposal to rapidly accelerate energy-efficiency standards through building codes may not be

practical or feasible. Rather, we believe the construction industry's process for developing building codes through peer-reviewed and science-based processes that have been in place and well accepted for decades has generally served both the public and industry well. We urge Congress to work with the existing code bodies, construction industry and other stakeholders to maximize attainment of energy-efficiency goals while minimizing adverse economic impacts on businesses and consumers. NRCA looks forward to working with Congress to ensure that any energy-efficiency standards for roofing systems included in climate change legislation are effective, practical and achievable.

In support of this objective, NRCA urges Congress to consider providing tax incentives for building owners who install roofing systems that go beyond the requirements of existing building codes. For example, NRCA is working with industry partners on a proposal to provide a 30 percent tax credit for commercial roofs that significantly exceed current building code requirements for energy-efficiency through higher insulation levels. The reduction in carbon emissions from this proposal over five years is estimated at 12.2 million metric tons, which is equal to the emissions from an average coal-fired power plant over 2.6 years. NRCA believes this type of market-based solution would be a highly effective way to achieve the policy goals of the ACES proposal.

NRCA does have concerns about the impact of the cap-and-trade system in the ACES proposal, of which the basic outlines would be a cap on carbon emissions, along with a federal auction of emission allowances and the establishment of a market for trading such allowances. Given that a large percentage of roofing products contain asphalt-based and other energy-intensive materials, a cap-and-trade program could adversely impact the price-sensitive roofing industry by substantially raising input prices. Moreover, many of the details about exactly how the cap-and-trade program in the ACES proposal are not included in the discussion draft, and thus it is impossible to gauge the impact of this proposal without more specifics.

While a cap-and-trade program may ultimately create market opportunities for energy-efficient and energy-producing roofing systems, these benefits would be outweighed by significant increases in the cost of roofing materials or the potential negative consequences to our economy's overall health. Therefore, NRCA urges Congress to remember that higher costs will have to be passed on to consumers, and this could inhibit the growth of our industry and the adoption of more energy-efficient roofing.

EPA Greenhouse Gas (GHG) Endangerment Finding

NRCA has serious concerns with regard to the Environmental Protection Agency's recent "proposed endangerment finding" which if, implemented, will result in greenhouse gases being regulated under the Clean Air Act (CAA). We believe that the EPA's burdensome regulatory approach to addressing this issue would restrict the positive role that energy-

efficient and energy-producing roofing can play in reducing emissions from residential and commercial buildings. Moreover, this approach would significantly burden and subsequently reduce both the construction of new buildings and even existing roof replacement activity.

The EPA's action would trigger four major regulations and invasive carbon controls on buildings and other stationary emissions sources. Regulation of carbon emissions under the CAA would, according to a study by the U.S. Chamber of Commerce, subject 1.2 million buildings in the U.S. to Prevention of Significant Deterioration (PSD) permitting as a condition for new construction or modifications. This process can take 6-12 months and cost, on average, \$125,120 with a paperwork burden of 866 hours. If only 40,000 of the 1.2 million buildings opt to try new construction or to make modifications, PSD compliance alone would cost over \$5 billion and require 17,320 full-time employees. Finally, these same 1.2 million entities would have to obtain Title V operating permits as a condition of their operations, which requires at least a \$25-per-ton compliance fee and grants a 60-day window for any U.S. citizen to challenge the permit by way of a citizen suit.

It is estimated that at least one million mid-size to large buildings already emit enough carbon emissions per year to become regulated stationary emissions sources and nearly 200,000 manufacturing operations would become regulated. The compliance costs for the four CAA programs triggered by an endangerment finding would be financially and administratively unreasonable for millions of new regulated entities. Also, Congress would have to vastly increase amounts appropriated to EPA, and perhaps have to appropriate greater amounts for state and local air quality grants, just to administer the permit programs.

The excessive regulation unleashed by the EPA's endangerment finding could have severe adverse impacts the construction industry generally and small businesses in particular. Many of NRCA's members have already had untold numbers of projects cancelled or put on hold indefinitely due to the current severe downturn in construction activity. The new permitting processes put in place by the EPA would further delay many construction projects that are key to the survival of small contractors in our industry. Even smaller roof replacement projects, the bread-and-butter of NRCA's members, have slowed greatly for residential and commercial roofing contractors alike. The advent of additional regulation and permitting would only serve to slow this activity to a virtual standstill.

Market-Based Approach to Climate Change

NRCA urges Congress to adopt market-based solutions and incentives to address climate change and energy issues. NRCA believes that Congress should remove current obstacles to an expansion of energy-efficient roofing that now exist in federal law. One

such obstacle could be removed by passage of the "Green Roofing Energy Efficiency Tax Act" (GREETA), H.R. 426.

GREETA is bipartisan legislation by Rep. Bill Pascrell (D-NJ) and Rep. Wally Herger (R-CA) to facilitate greater levels of investment in green technologies that reduce carbon emissions and also spur economic growth within the construction and manufacturing industries. The legislation amends section 168 of the Internal Revenue Code to provide a 20-year tax depreciation schedule for commercial roof systems that meet a benchmark energy-efficiency standard. NRCA commends Chairwoman Nydia Velazquez and Rep. Dennis Moore (D-KS) for cosponsoring GREETA.

Passage of GREETA is necessary because the depreciation schedule for nonresidential property was increased from 15 years to 39 years between 1981 and 1993. However, the current 39- year depreciation schedule is not a realistic measure of the average life span of a commercial roof. A study by Ducker Worldwide, a leading industrial research firm, determined the average life expectancy of a commercial roof to be 17.5 years.

The large disparity between the current 39-year depreciation schedule and the average life span of a commercial roof serves as a major disincentive for building owners to replace failing roofs. This disincentive is slowing the adoption of more advanced energy-efficient and environmentally-beneficial roofs, because an owner who replaces a roof before 39 years have elapsed must continue to depreciate that roof for tax purposes even though it no longer exists. A Treasury Department Report to Congress on Depreciation Recovery Periods and Methods (July, 2000) corroborated this quandary, finding "...a 'cascading' effect, where several roofs are being depreciated at the same time, even though only one is physically present." Given this situation, many building owners choose to do only piecemeal repairs, most often with older technology, rather than replace a failing roof in its entirety with new, more energy-efficient materials.

GREETA will rectify this situation by reducing the tax depreciation schedule for commercial roof systems from 39 to 20 years for roofs that meet the energy efficiency requirements of the benchmark Standard 90.1 of the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE). Enactment of this legislation will accelerate the adoption of energy-efficient commercial roof systems by eliminating the disincentive in the tax code for building owners to install such systems. In doing so, GREETA will provide environmental benefits by reducing carbon emissions through enhanced energy conservation.

By accelerating demand for technologically-advanced "green" roofing systems, GREETA will:

- Reduce U.S. energy consumption by 13.3 million kilowatt hours annually;
- Cut carbon dioxide emissions by 20 million lbs. per year;

- Create 40,000 new "green-collar" manufacturing and contracting jobs;
- Add \$1 billion of taxable annual revenue to the economy; and,
- Add 250 to 300 million square feet of roofing material installations annually.

Enactment of GREETA will also benefit millions of small business owners by eliminating or mitigating the "cascading effect" of having to depreciate more than one roof in instances where a roof must be replaced before the 39-year depreciation schedule has been completed. This tax simplification feature of GREETA for commercial building owners that install energy-efficient roofs is an even greater benefit for small businesses that own their building.

Given the environmental, energy conservation and economic benefits of GREETA, the legislation enjoys strong support among business groups and organized labor. The bill is supported by the United Union of Roofers, Waterproofers and Allied Workers, the AFL-CIO's Building and Construction Trades Department and the Joint Roofing Industry Labor and Management Committee. In addition to NRCA, other business groups that support GREETA include the Asphalt Roofing Manufacturers Association, Building Owners and Managers Association, International Council of Shopping Centers, National Association of Convenience Stores, and the Polyisocyanurate Insulation Manufacturers Association. GREETA also enjoys the strong support of several U.S. building material manufacturers with global operations.

Conclusion

To conclude, NRCA believes that recent advances in energy-efficient and energy-producing roof systems provide unique opportunities for our industry to play a significant role in providing numerous environmental, energy conservation and renewable energy benefits to the public. NRCA greatly appreciates this opportunity to testify today and looks forward to working with Congress on climate-change and energy-related legislation that meets the needs of roofing contractors and other industry participants across the nation.